



Ecosystem Management Program BULLETIN



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NON-NATIVE BIRD INCREASES ITS RANGE ON THE BIG ISLAND. Recently, while gearing up for the annual forest bird census in the southwest portion of Pōhakuloa Training Area (PTA), Natural Resource Specialists documented a new bird species to this area. Perched in the branches of a naio tree, a mixed flock of African silverbills, *Lonchura cantans*, and yellow-fronted canaries, *Serinus mozambicus*, foraged together with a third species. At first, this new bird's size and behavior helped it to blend in with the crowd, but once viewed through binoculars its bright red tail gave it away. The flock of birds chirped excitedly and took flight, but not before biologists identified the stranger amongst their midst: the lavender waxbill, *Estrilda caerulescens*.



Lavender Waxbill, Photo by Ben Tupper

The lavender waxbill is a small grayish finch with a red rump and tail. Its native range is tropical western Africa, but it was introduced to the Hawaiian Islands in the 1960's. It's established a population in the Pu'u Wa'a Wa'a area and has remained there for the last 40 years. This recent sighting at PTA is the first recorded, and has significant implications. Since lavender waxbills are not a native species to the Big Island, it is important to track their population trends and possible range expansions. The lavender waxbill

is not limited by the environmental variation on the island, so any signs that it is expanding its range from Pu'u Wa'a Wa'a could mean an island wide distribution some day. This would mean more habitat competition for native Hawaiian birds, as well as alien plant seed dispersal.

Natural Resource Specialists at PTA conduct annual bird census surveys to maintain records of bird population trends and, in the case of the lavender waxbill, range expansion. We will continue to keep an eye out for this new species and any other changes in our PTA bird populations.

NEW STUDENT INTERNS AT PŌHAKULOA TRAINING AREA HELP SORT THROUGH ARCHAEOLOGICAL DATA. The Cultural Resource Program at PTA would like to welcome two student interns from the University of Hawai'i Hilo. Ms. Elizabeth "Lisa" Leinā'ala Kahahane and Ms. Tanya Souza are both anthropology majors at UH-Hilo and interested in Hawaiian archaeology. The students have been working closely with Dr. Peter Mills, Chair of the UH-Hilo Anthropology department, in the lithic analysis lab. They have plenty of experience working with Dr. Mills' EDXRF spectrometer, which allows the rock samples and stone artifacts to be sourced in a non destructive manner. They are currently analyzing several artifact types from our curation facility.

Lisa, originally from Lahaina, Maui, has been a great help is sorting out discrepancies in our artifact database, and is currently working on a disaster plan for our facility. The disaster plan will be applied in emergency situations that may involve artifacts and/or serious damage that require immediate action. The plan will also include how to anticipate and avoid emergencies.

Tanya, who was born and raised on the Kona side of the Big Island, is currently analyzing the pōhaku 'eho

or bird stones of our collection and getting them ready for EDXRF element and DNA residue analysis. We hope to learn where these stones originated and if in fact they were used to cook birds and possibly even what species were being eaten.

The projects the students are working on will provide them with school credit and potentially another facet to the history of Pōhakuloa and Hawai'i. It has been an honor and a pleasure to have them aboard. We hope to continue this partnership with UH-Hilo and feel that it is a good opportunity to share Pōhakuloa's cultural resources and give students work experience in cultural resource management.



Pōhaku 'eho or bird stone from the PTA collection

NATURAL RESOURCES EDUCATION AT PŌHAKULOA TRAINING AREA: Since 1999, the US Army has partnered with the National Park Service and US Fish and Wildlife Service to promote environmental education to 6th through 12th grade students on the Big Island. The name of the program is "Imi Pono no ka 'Aina" which translates to "Seeking Good for the Land". Students interested in conservation have the opportunity to participate in the week-long program learning about cultural and natural resources in Hawai'i while visiting various conservation areas on the Big Island. There are three groups each year, one during spring and two during summer. One of their destinations includes PTA.

Our study of natural resources at PTA begins with a safety briefing from Range Control, followed by an introduction to natural resource management and

tour of our Rare Plant Facility and interpretive garden. Then off to the field we go! The main themes of educational focus are native vs. invasive species and dryland vs. rainforest ecosystems. We visit an area that is dominated by native species, where students draw a picture of the surrounding habitat. We then observe differences between the dryland forests at PTA and rainforests found elsewhere on the island.



Students drawing pictures of PTA habitat

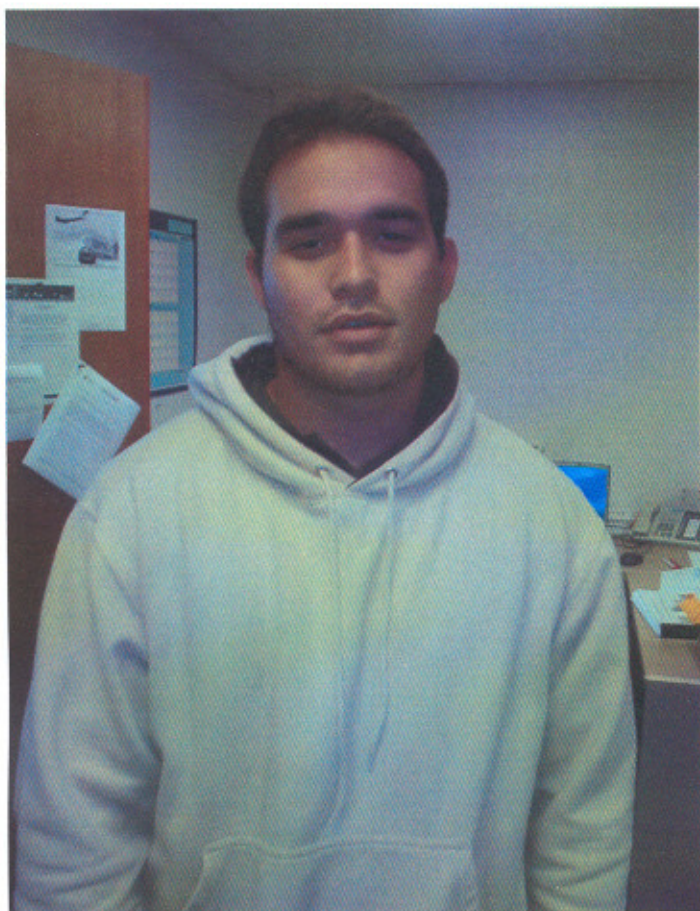
We discuss why the plants in dryland forests at PTA have evolved and adapted so differently from rainforest plants. We then visit an area that is dominated by invasive species, where students again draw a picture of the surrounding habitat. We focus on a few invasive species and discuss the problems caused by invasive species and challenges in protecting our native plants.



Students controlling invasive plants at PTA

After a hearty lunch, we have a field exercise. Students have the opportunity to visit one of our Management Project areas and experience firsthand what our jobs are like. We observe differences between managed and unmanaged areas, and then work for an hour on an actual field project. Projects we have worked on with the students include hand-clearing weeds, fence building, and vegetation monitoring.

"Imi Pono no ka 'Aina" offers a wonderful opportunity to educate the youth in the fields of natural and cultural resources and the importance of conservation and preservation of these resources. Continuing this tradition helps to ensure the future of the resources we strive to protect for generations to come. Furthermore, "Imi Pono no ka 'Aina" demonstrates the Army's commitment toward reaching out to local youths and responsible stewardship of the land.



Brandt Shaner

GROWING BY LEAPS AND BOUNDS!

Introducing one new member of the Cutrual Resource Team and six new members of the Oahu Natural Resource Team. Brandt Shaner was born and raised in Kāne'ohe. He started work with DPW in August 2006. He currently assists with issues related to historical properties. He has a degree from the University of Hawai'i at Mānoa. Welcome Brandt!

Simoi Luafalemana joined our team in June as a part of our new fence crew. This Moloka'i native brings to our program a strong background in fence building for conservation in Hawai'i. He began his work in conservation in 1996, building fences in Hawai'i with the West Maui Mountain Company. Simoi also worked at the Kalaupapa National Park in a variety of native ecosystems ranging from coastal to wet forest. He enjoys traveling to see his son play football for the University of Washington, and he is an avid canoe paddler and diver. He has a great attitude and makes us all laugh. Aloha Simoi!



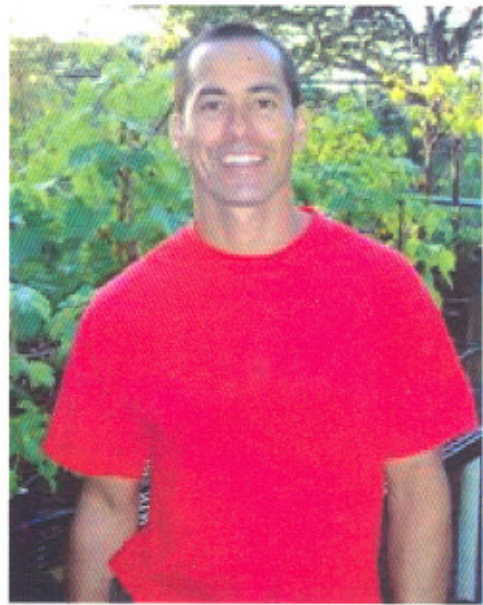
Simoi Luafalemana

Laura Chapman (no relation to Dog Chapman) joined our team in August as our new horticulture assistant. She is originally from Athens, Georgia, where she received a BSA in Horticulture from the University of Georgia. She moved to O'ahu in 1999 and shortly after began her work in propagating native plants in Hawai'i as a horticulturalist for the State Division of Forestry and Wildlife. She is hard working but has a laid back attitude. In her spare time she enjoys surfing, gardening, painting and photography. Aloha Laura!



Laura Chapman

Dan Sailer joined our team in September as a Natural Resource Management Coordinator. Dan brings a wealth of knowledge and conservation experience to our program. He worked for 6 years for The Nature Conservancy O'ahu program (TNC), where he managed the Honouliuli Preserve. Dan is from Pearl City and went to school at the University of Hawai'i at Mānoa where he received a degree in Philosophy and Political Science. He also worked on a directed study program at UH in Environmental Natural Resource Management, with an emphasis in Botany. In his spare time Dan enjoys watersports, ultimate Frisbee and spending time with his family. He thinks out of the normal conservation box, has a positive "can-do" attitude and sets a standard others want to follow. We are fortunate to have him aboard, Aloha Super Dan!



Dan Sailer

Jan Nomi Nakamura joined our team in the middle of October as a Natural Resource Management Tech. A Waipahu native, she brings to our program a strong science background and a passion for conservation. She completed her undergraduate at the University of Hawai'i at Mānoa where she received a BS in Biology. Jan then furthered her education at Berkley where she completed her MS in Environmental Science, Policy and Management, with work also in Entomology. She received hands-on experience in conservation in Hawaii with TNC where she worked with the O'ahu program as well on Moloka'i. Jan is also knowledgeable with computers, and enjoys building them in her spare time. Aloha Jan!



Jan Nakamura



Kalani Matsumura

Kalani Takashi Matsumura recently joined our team in November as a Natural Resource Management Tech. He is from 'Aiea, and his educational background is in Engineering, which he majored in at USC. Kalani previously worked as an Americorps intern with TNC. He enjoys surfing, and eating good food, especially Mexican. Kalani is upbeat, has a good work ethic and is always brainstorming new design ideas. In the works is a fencing backpack designed to carry barb wire. Our program will benefit from his technical skills, Aloha Kalani!



Kahale Pali

Our newest recruit, Kahale Pali joined our program this week as a Natural Resource Management Tech. He also switched over from TNC O'ahu program. This Kane'ohe native received a Bachelors of Science in Biology at BYU Hawai'i. He has a strong conservation background. After college, he interned with TNC O'ahu, and then worked with the O'ahu Invasive Species Committee. Most recently he worked with TNC as assistant Natural Resource Manager for the Honoluiuli Preserve. In his free time Kahale enjoys hunting and surfing. He has a good sense of humor and brings a fresh viewpoint to our program. Aloha, Kahale!

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